molift®

PARTNER 255

TECHNICAL MANUAL

CE

- a patient lifter from

molift®
designed for life

TM03101 Molift Partner 255 Engelsk

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IMPORTANT!

The patient lifter is only meant to be used by qualified personnel.

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General advice

This manual contains important safety instructions and information regarding the repair and maintenance of the lifter. Carefully read the manual before using the lifter in order to be familiar in the function and use of the lifter.

Explanation of symbols
Locations in diagrams are reffered as follos: **C**㉘ C28 refers to Appendix A, position 1.

This symbol is used to point out instructions and information related to work place safety where injury may occur if the information is disregarded or ignored. Follow these instructions, be careful and attentive at all times.

This symbol indicates important information regarding the use of the equipment. If not taken into consideration, it may lead to damage or functional defects to the lifter or other equipment.

This symbol indicates important and useful information. If taken into consideration, it will help the operator of the lifter to work efficiently. It may help simplify routines and to explain complicated facts.

Caution
Heavy, long and/or sharp objects will have to be handled when repairing the lifter. When disassembling and assembling the lifter you may also find that the stability of the lifter may be reduced, increasing the risk of toppling the lifter or parts falling down.

Therefore, use general caution when performing maintenance and repairs.

Read the user manual for operating instructions and safety precautions.

Responsibility
Please read these operating instructions carefully before putting the product into operation. We assume no liability for damage or malfunctions resulting from failure to comply with the instructions. Warranty claims must be made immediately on detecting the defect. Remember to quote the serial number. Consumable parts are not subject to the warranty.

All technical information, data and instructions for operation contained in these operating instructions were up-to-date at time of print and are compiled on the basis of our experience and to the best of our knowledge. We reserve the right to incorporate technical modifications within the scope of further development of the product described in this manual. No claims can be derived from the information, illustrations or descriptions contained in these instructions. We assume no liability for any damage or malfunction caused by operating errors, noncompliance with these operating instructions or inappropriate maintenance. We expressly point out that only genuine Molift AS spare parts and accessories approved by us may be used. For safety reasons, the fitting and use of spare parts or accessories, which have not been approved, and unauthorised modification or conversion of the product, are not permitted. Molift AS will accept no liability for damages resulting from such acts.

With the exclusion of product liability, Molift AS is liable for faults or omissions on its part within the scope of the warranty obligations stated in the purchase contract. Claims for damages are excluded, irrespective of the legal reason from which such claims are derived. Only documentation belonging to the actual equipment is valid.

Any failure to comply with the safety regulations and precautionary measures stated in these operating instructions renders the declaration of conformity supplied with the system in accordance with Council Directive (93/42/EEC) concerning medical devices invalid.

Technical description

Main parts
The lifter is delivered in three separate parts

1. Chassis with legs
2. Column with battery holder and electronics
3. Arm with suspension and rubber protection

Chassis with legs
The chassis **C**㉘ is made of moulded aluminium. The adjustable legs is made of aluminium and is attached to the chassis with the leg spreading mechanism and motor **C**④. The lifting motor **C**③ is also placed inside the chassis.

Column with battery holder
The column **D**⑮ is made of aluminium and placed on the chassis. Inside the column is the ball screw **D**⑱.④ on which the trolley is attached. The screw is protected with a sealing **D**⑧. The battery holder is placed on the back of the column, and contains the main circuit board with all the electronics.

Electronics
The electronics consists of a main circuit board **E**⑥ including the hand control contact, emergency stop, emergency lowering, batterylamp and servicelamp. All the functions are dependent on the main circuit board. On the main circuit board there is a counter which register the number of hours with activity. After a certain time the counter gives a signal to the servicelamp that illuminates to show the operator that service is needed. An electrical emergency lowering button is placed beside the emergency stop button. A manual emergency lowering function is on the top of the column and can be used by electrical failure.

Battery
The battery **A**⑤ is to be placed in the battery holder and consists of 22 battery cells in one pack.

Arm with suspension and rubber protection
The lifting arm **F**⑫ is made of aluminium and is placed on the trolley. A locking mechanism **F**⑥ ensures that the arm is fixed correctly on the trolley. The trolley and locking mechanism is covered with a rubber protection **F**④.

The suspension **A**④ is made of steel with 4 safety hooks for attaching the sling. The suspension is available in several alternative sizes and can easily be replaced.

Hand control unit
The hand control unit **A**⑥ has 4 buttons for operating the lifter, one ”up” and one ”down” button, and one button for ”legs out” and one for ”legs in”. A lamp indicates when the battery needs charging. The hand control contact is placed on the bottom of the battery holder.

Charger and battery
Molift Partner 255 has a battery consisting of a 26 V battery pack **A**⑤, and a charger **A**⑦ which makes it possible to charge the batteries by placing the battery in the charger.

Technical data

Material:	Aluminium, steel and plastic composite.
Lifting Motor:	24 V DC
Leg spreading motor:	24 V DC
Battery:	1,9 Ah NiCd or 2,1 Ah NiMH 22 cell
Number of lifts with fully charged battery:	75 lifts (75 kg, 500 mm up/down)
Lifting capacity:	255 kg (SWL)
Lifting height:	1275 mm
Lifting speed:	30-35 mm/sec for a normal lift and fully charged battery.

Dimensions:	1175 x 700 x 1902 mm
Height to sling attachment point on suspension:	min 420 mm max 1695 mm

Weight:

Total, incl battery	44 kg
Chassis	20 kg
Column	14 kg
Arm/suspension	8.4 kg
Battery	1.5 kg

Technical specifications may change without prior notice.

Service

Remove the battery before performing maintenance on the lifter, to make sure the lifter does not move unintentionally.

The Service lamp on the lifter will give a signal when the lifter needs service. The Service lamp will first give a yellow light, then red, meaning thet service is required. If there is a sound together with the light, it means the lifter needs service immediately.

Service lamp	Status
No light	Power save
Green	Ready for use
Yellow	Order service, lifter still works
Red	Perform service
Red + sound	Perform service immediately
Flashing yellow	Overheating

Service
Service is to be performed when the service lamp gives a signal the first time (after approximately 10 000 normal lifts of 75 kg/12 sec) or every 5th years.

- Lubricating and check of brake
- Changing of damaged and worn parts

Cleaning

Detergents must be pH-neutral. Do not use solvents or strong liquids - this may damage surfaces on the lifter and change the quality of the material. For disinfection when needed; use isopropyl alcohol. Avoid abrasive or etching cleaning products.

Clean surfaces with a damp cloth using an appropriate detergent.

Troubleshooting
If the lifter does not work, check the power first. Check that the battery lamp and service lamp does not glow when pushing any button. See the Troubleshooting table in Operator Manual.

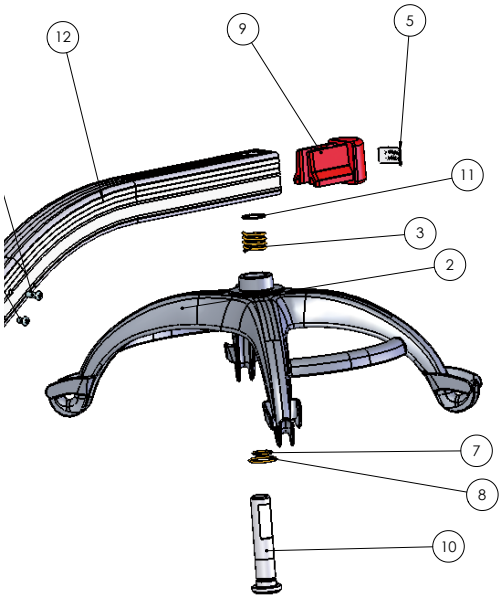
If the troubleshooting procedure does not lead to any diagnosis, judgement and eliminating methods must be used.

Maintenance

Remove the battery before performing maintenance on the lifter, to make sure the lifter does not move unintentionally.

Changing of the suspension

- Push the suspension bolt upwards and remove the front cap (9).



- Remove the bolt (10) and suspension. Take care of the spring and washer on the bolt
- Mount the new suspension with the bolt, spring and washer.
- Push the suspension upwards while pushing the front cap back in.

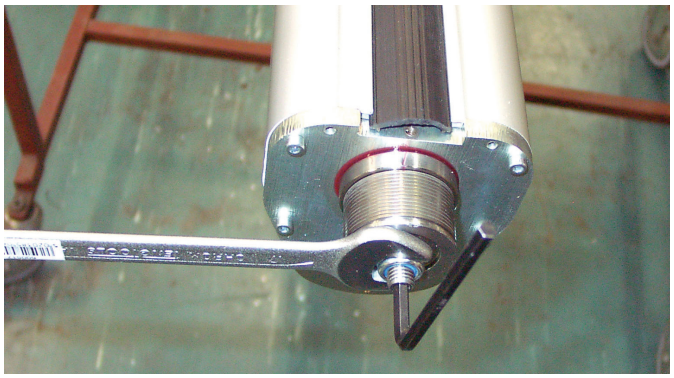
Repair of column

- Remove the lifting arm with suspension
- Remove the column from chassis and lay it on a table.
- Remove the screws and the top cap.

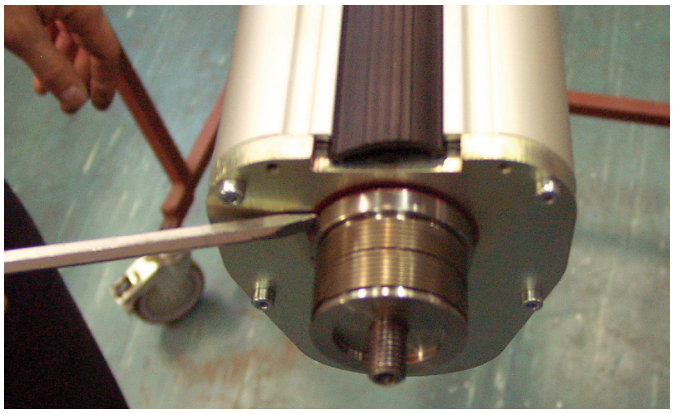
Removing and lubricating of the brake

Make sure that the ball screw is unloaded when removing the lock nut

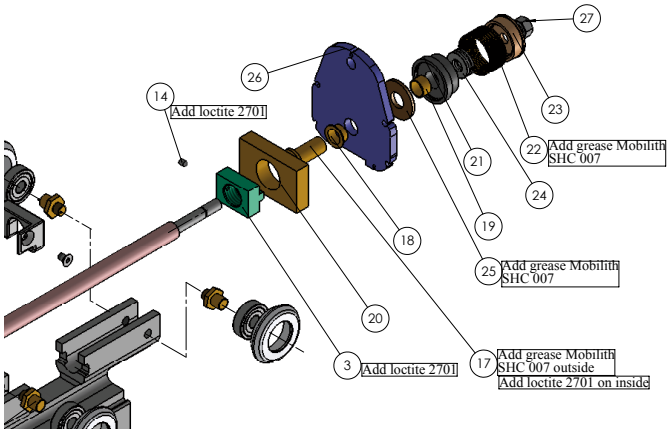
- Loosen the hexagon lock nut on the top and remove it.



- Remove the brake in one piece.



- The brake consists of several parts (brake washer (25), slide bearing (19), bearing house (21, 23), bearing (24) and spring brake (22)). When changing the brake, this is changed as one complete part.

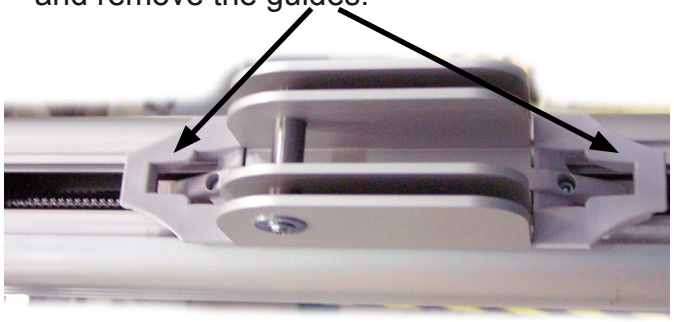


Removing the column sealing

- Remove the screw on the bottom of the sealing.
- Remove the hexagon lock nut on the top of the sealing
- Pull the sealing out of the column and through the trolley.

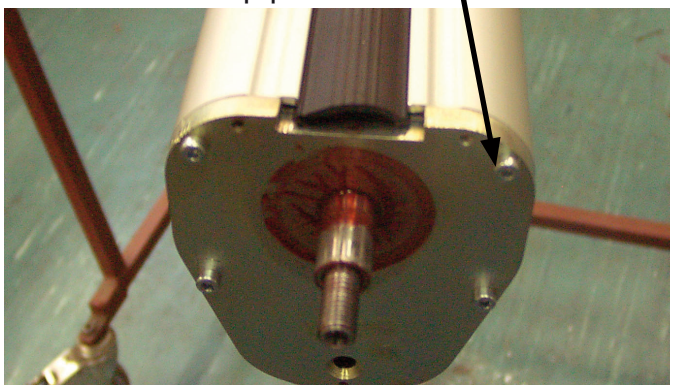
Removing the sealing guides

- Remove the screws (13) holding the guides and remove the guides.

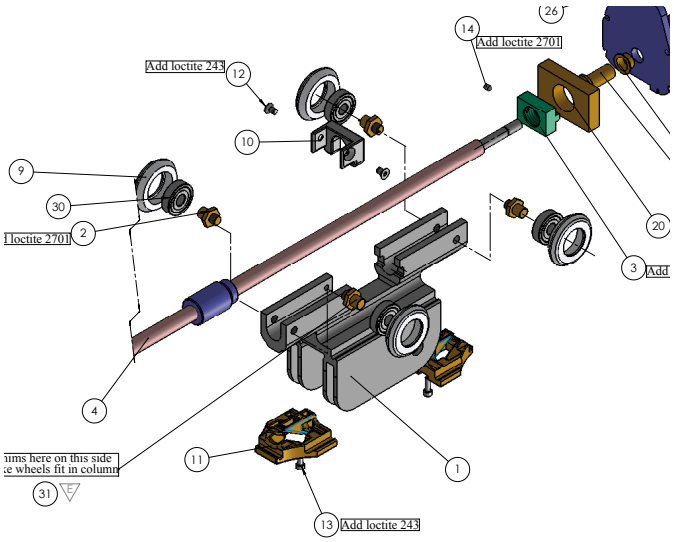


Removing the trolley with wheels

- Remove the top plate with screws.

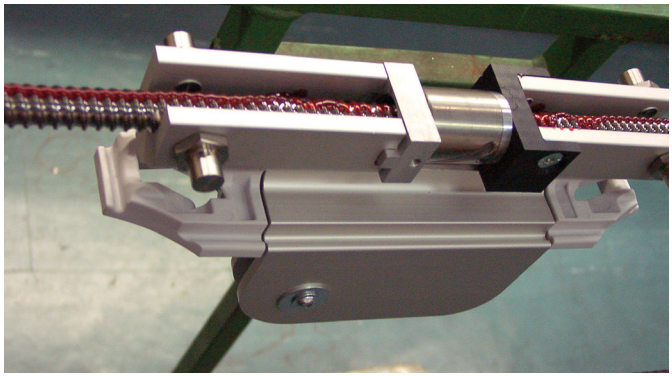


- Remove the end stopper (20) and move the trolley to the top of the column.
- Take the trolley carefully out from the column together with the ball screw. *Note! It is not necessary to remove the ball screw completely.*
- Remove the wheels (9) with bearings (30).
- Use heat when removing the screw (12) holding the distance plate (10).
- The trolley (1) can be removed.



Mounting of trolley and wheels

- Mount the trolley on the ball screw with the distance plate (10) and the guide sleeve (3). Add loctite 243 on the screws (12)



- Mount the sealing guides (11).
- Place the wheels on the shaft pins on trolley. Add Loctite 2701 on the shaft pins.

Use shims on the inside of the shaft pin (2) to make wheels fin in column.

- Place the trolley with wheels in column and attach the top plate with slide bearing.
- Fix the top plate with screws when trolley is at top of column.

Mounting a new sealing

- Pull the sealing in place in the column opening and through the guides.

The sealing is elastic and must be stretched before fixed. Fix the sealing in the lower end, place the trolley in the top end, and stretch the sealing before fixing with a screw in the top end. Cut the ends.

Mounting the brake

- Add grease on the bearing and brake washer.

- Place the complete brake on the top plate.

Make sure the brake is properly greased.

- Place the hexagon lock nut and tighten by hand.

Check the contact points between chassis and column are clean and movable before mounting the column.

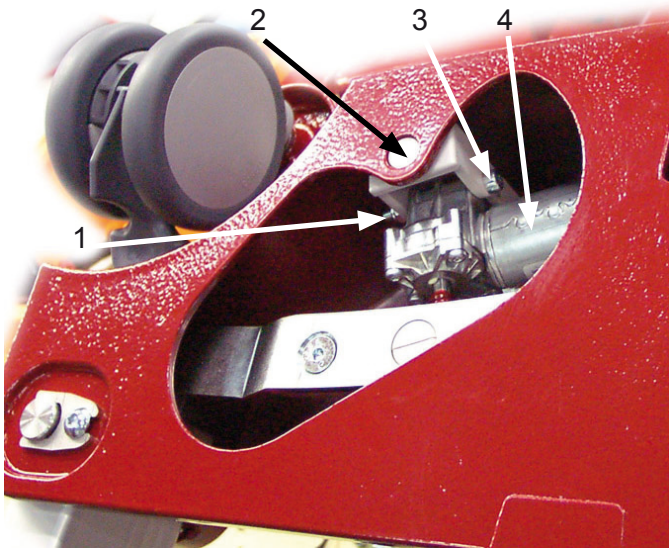
- Mount the column on the chassis and perform a function test of the column.
- Mount the top cap with screws.
- Mount the lifting arm with suspension
- Test the lifter according to the safety control test

Changing parts in chassis

The legs should be in middle position when dismounting to have best possible access.

- Remove the column with lifting arm from chassis and put it aside on a safe place.
- Place the chassis on a working stand.

Removing the leg spreading motor

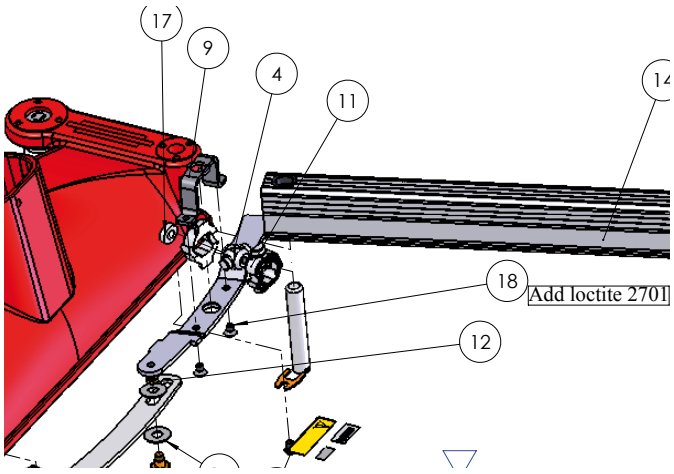


- Loosen the leg spreading motor (4) from the swiwel joint (2) by removing the screw (3) and nut (1).

You need an external power source to run the leg spreading motor out of the nut spindle.

Take care that no fingers are crushed when moving the leg spreading mechanism.

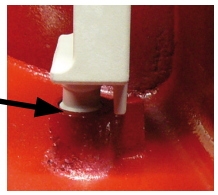
- Disconnect the cable contact on the leg spreading motor (push and pull), and attatch the external power.
- Run the leg spreading motor in until the spindle is free from the nut holder.
  NOTE! Be careful not to run legs in end position.
- Remove the motor and disconnect the external power.
- If necessary the bracket (9), the nut holder (11) with nut spindle (4) can be changed by removing the screws (18). Use heat to remove the screws.



- The swiwel joint can be removed by turning it counterclockwise until it falls down and out off position. Pull the swiwel joint carefully out. (The swiwel joint is supported by a flange in the back when it is in position).

Mounting the leg spreading motor

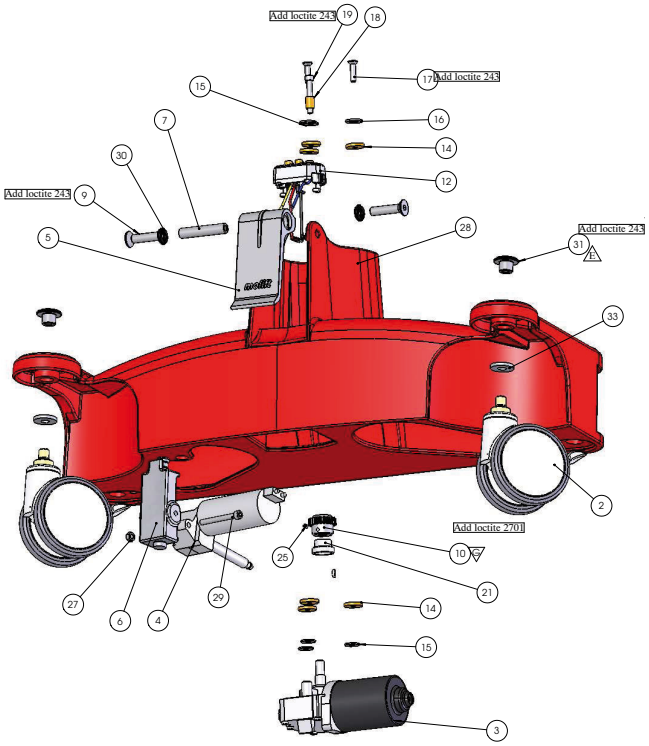
- Mount the spindle nut (4) and nut holder (11) with the bracket (9). Add Loctite 241 on the screws (13).
- Place the swiwel joint by turning and pulling.



- Put the motor (4) in correct position and run the spindle out until it is fixed in the nut spindle (approx on the middle of the spindle) with external power.
- Fix the leg spreading motor in the swiwel joint with the screw (21) and nut (28).
- Connect the cable contact - push and pull.
- Mount the column with lifting arm on chassis.
- Test the lifter according to the safety control test

Removing the lifting motor

- Use heat and remove the 3 screws (17, 19) and remove the lifting motor (3) from chassis.
- Unsolder the cables to the motor.
- Remove the motor gear (10) by removing the set screw (25), use heater.



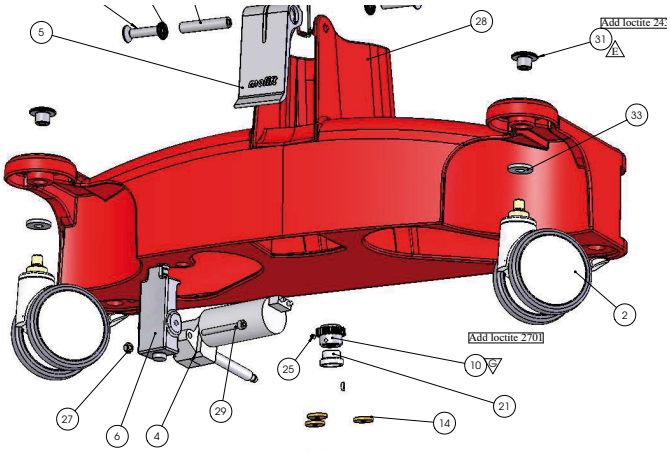
- Replace the motor gear (10) with distance (21), add Loctite 2701 on the set screw (25).
- Place lifting motor and attach with screws. Add Loctite 241 on screws and tighten.
- Solder the cables on the motor.
- Check that motor functions correctly.

Castors

Place the lifter in a stable horizontal position and proper working height. Remove the column with suspension to make it easier to handle.

Rear castors

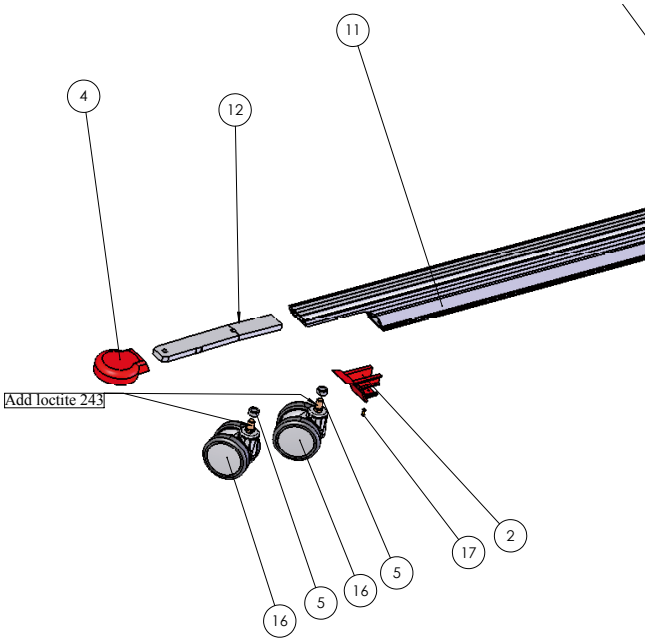
- Loosen the special nut (31)



- Unscrew the castor (2), take care of the washer (33).
- Assembly is done in reverse order. Add Loctite 241 on the nut.

Front castors

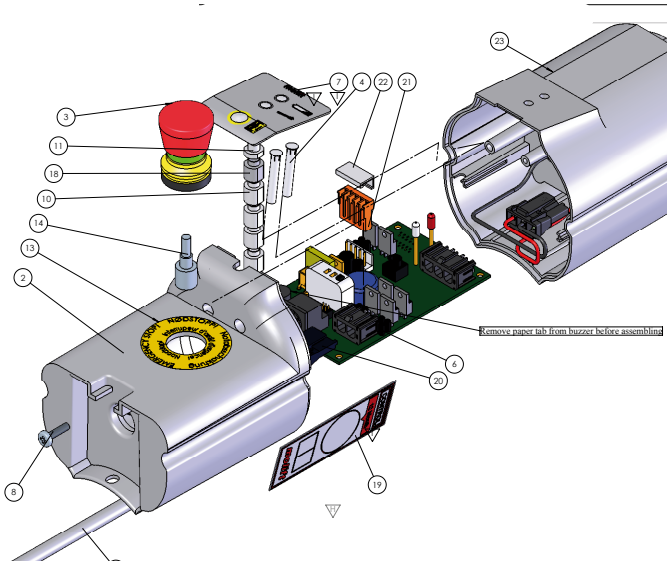
- Use heat and unscrew the castor (16).
- Add Loctite 243 on the screw and replace the castor



Main circuit board

The circuit board can be changed when all settings and data for this lifter is copied from the old circuit board to the new. If there is any trouble when copying the settings, please send the lifter to Molift AS or your dealer.

- Use the Molift Servicetool and copy to the PC first, then connect to the new card and download on request.
- Remove the battery and lifting arm with suspension, and place the column on a table.
- Loosen the membrane panel (7) and open the battery holder.



- Pull the circuit board (6) carefully out and loosen the cable connectors (5).

Take care of all extenders (10, 11) for the emergency lowering button.

Replacing emergency stop button

- Unscrew the emergency stop (3) from inside. Take care of the extender (14).
- Pull the emergency stop button out an loosen the cable.
- Place a new emergency stop and connect the cable.
- Make sure the extenderis in position. Tighten the emergency stop.

Mounting the circuit board

- Remove the paper tab on the buzzer before mounting the circuit board.
- Connect all cables and place the circuit board in the battery holder.

Make sure the LED's are placed correctly under the LED guides.

- Place the extenders (10, 11) for the emergency lowering button.
- Close the battery holder.
- Place a battery in the holder and check.
- Attach a new membrane panel on the battery holder.
- Mount the column with lifting arm on chassis.
- Test the lifter according to the safety control test

Labelling

Check the labels - damaged labels are to be replaced.

Finishing the job

Safety control

Any repair or replacement of parts requires a safety control afterwards as described in the procedures for service, maintenance and safety control.

Logging

The service manual has a table for logging of repair and work done on the lifter. Write down a short description of the incident in the appropriate interval. This will enable the owner and service partner to see previous history for the lifter and in that way maybe making future fault finding and repairs easier.

Date	*Description of fault*	*Type of repair*	*Date/sign.*

Inspection Diagram after Service and Repair

MOLIFT Partner 255

Service:

- ☐ Checked service lamp if service is necessary: YES (yellow or red light) / NO (green light)
  Use Molift Servicetool and read the lifters data - check number of lifts left before service: _____
- ☐ Service is completed : - Worn or damaged parts, or malfunctioning parts, are replaced. See description for parts replacement.
- ☐ Service light was reset using Molift Servicetool. N.B.: The service light must ONLY be reset after completed service!
- ☐ Perform safety inspection after service.

Safety Inspection

- ☐ The lift has been visually checked for damages, malfunction and deformation, and it is in order. Checked that lifting column is properly fastened to chassis. Checked that lifting arm and suspension are properly fastened and that the lifter has no loose parts.
- ☐ Checked that the cables and plug for hand control and charger have no damages, clean with alcohol to remove grease. Check that the contact probes between chassis and column are connecting well, clean or replace if necesary.
- ☐ Moved the lift around a level and even floor with approx. 100 kg hanging in the suspension about 60 cm above the floor. The lifter moves in all directions in a stable manner without tipping or experiencing any instability.
- ☐ Run the lifter up and down several times without load on a level floor: Checked that the lifter works properly and without irregular noise. Inspect for damage or deformation. Repeat the test with a test load, (approx. 100 kg). If necessary, replace the damaged parts and do the test again until the lifter is functioning correctly.
- ☐ Checked that the leg spreading mechanism functions properly. Tested with load. Verified that the legs do not move beyond inner and outer limits (working position) when operated with load.
- ☐ Checked that emergency stop and lowering (electric and manual) are working correctly.
- ☐ Service light is green and batteries are sufficiently charged.
- ☐ Marked lift with safety sticker with month/year and certificate number for completed safety inspection. Inspecting person must sign safety sticker and this diagram.

Inspection, repair and service should be done by a person certified by, or on behalf of Molift Group AS. Always complete below:

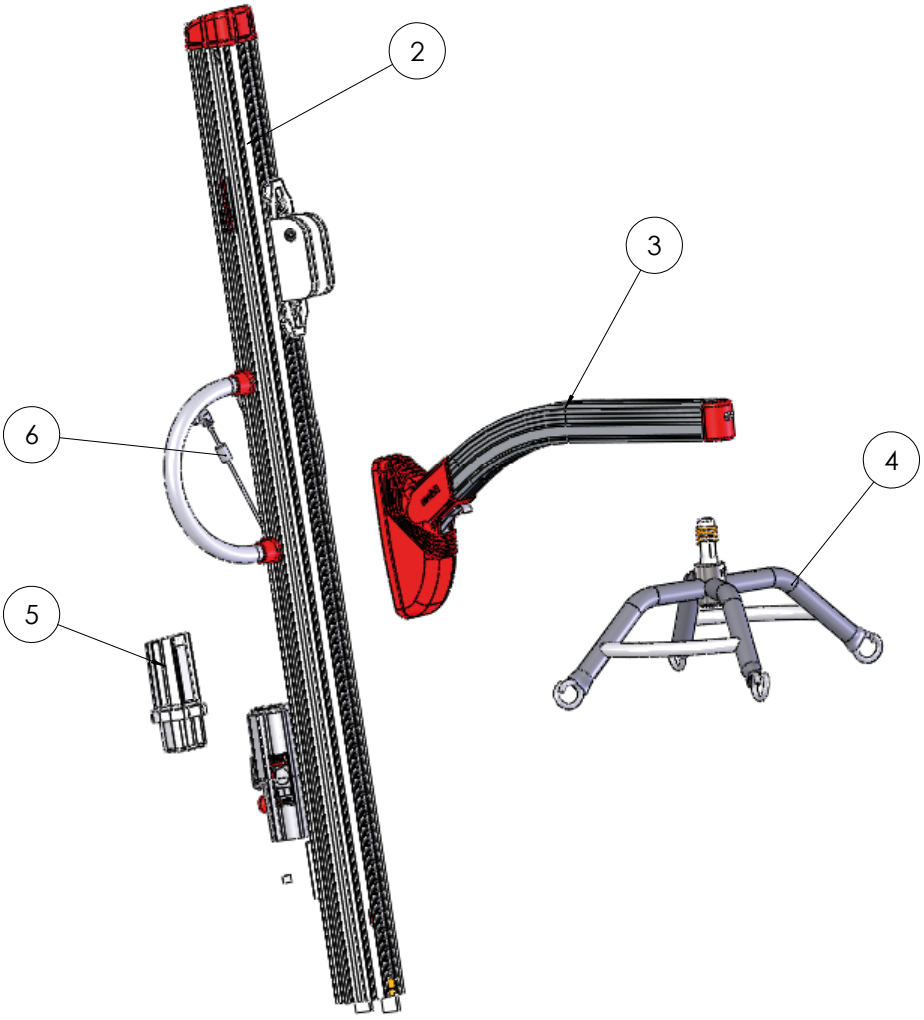
Client:_____ Serial number of lifter:_____

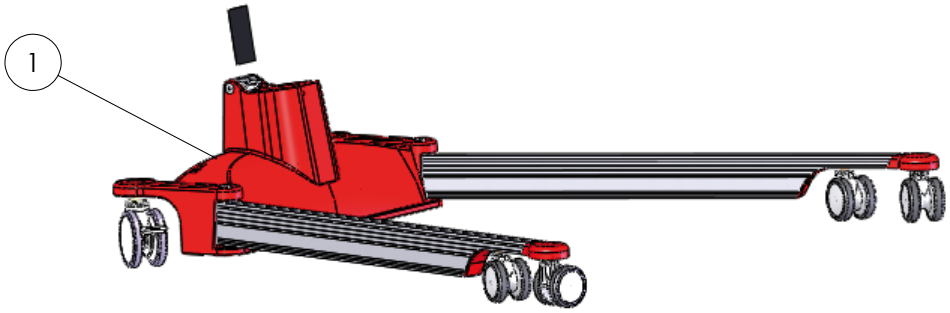
Date: _____ Signature:_____

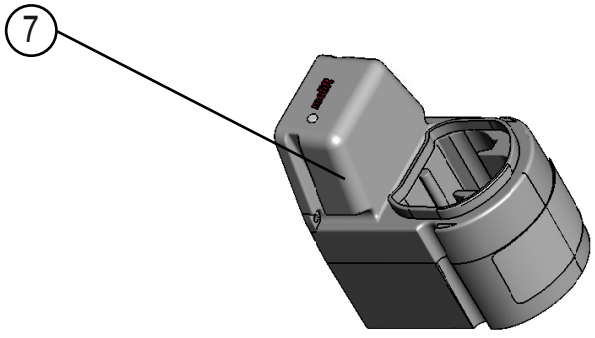
Appendix A

Pos.	Part.no	Fig	Description
1	1320001	App B	Chassis Complete P230/255
1	1320002	App G	Chas. Compl.low legs P230/255
2	1311002	App D	Column Complete P255
2	1311052	App H	Column w. Supporting arms P255
3	1330099	App F	Arm Standard P255
3	1331002	App F	Arm Scale P255
4		App G	Alternative Suspension
	1330053		Suspension 4pkt. LP230/255
	1330052		Suspension 4pkt. Steel X-large
	1330054		Suspension 4pkt. Steel Medium
	1330055		Suspension 2pkt. Steel Large
	1330056		Suspension Steel 2pkt. Medium
	2140002		Suspension 8pkt. P230
5	1341000		Battery
6	2018004		Hand control, Molift Partner 230
7	1340100		Battery Charger
8		App I	Electrical system
	1140105		Plug Europe
	1140106		Plug Great Britain
	1140104		Plug USA
	1140107		Plug Australia

Main parts



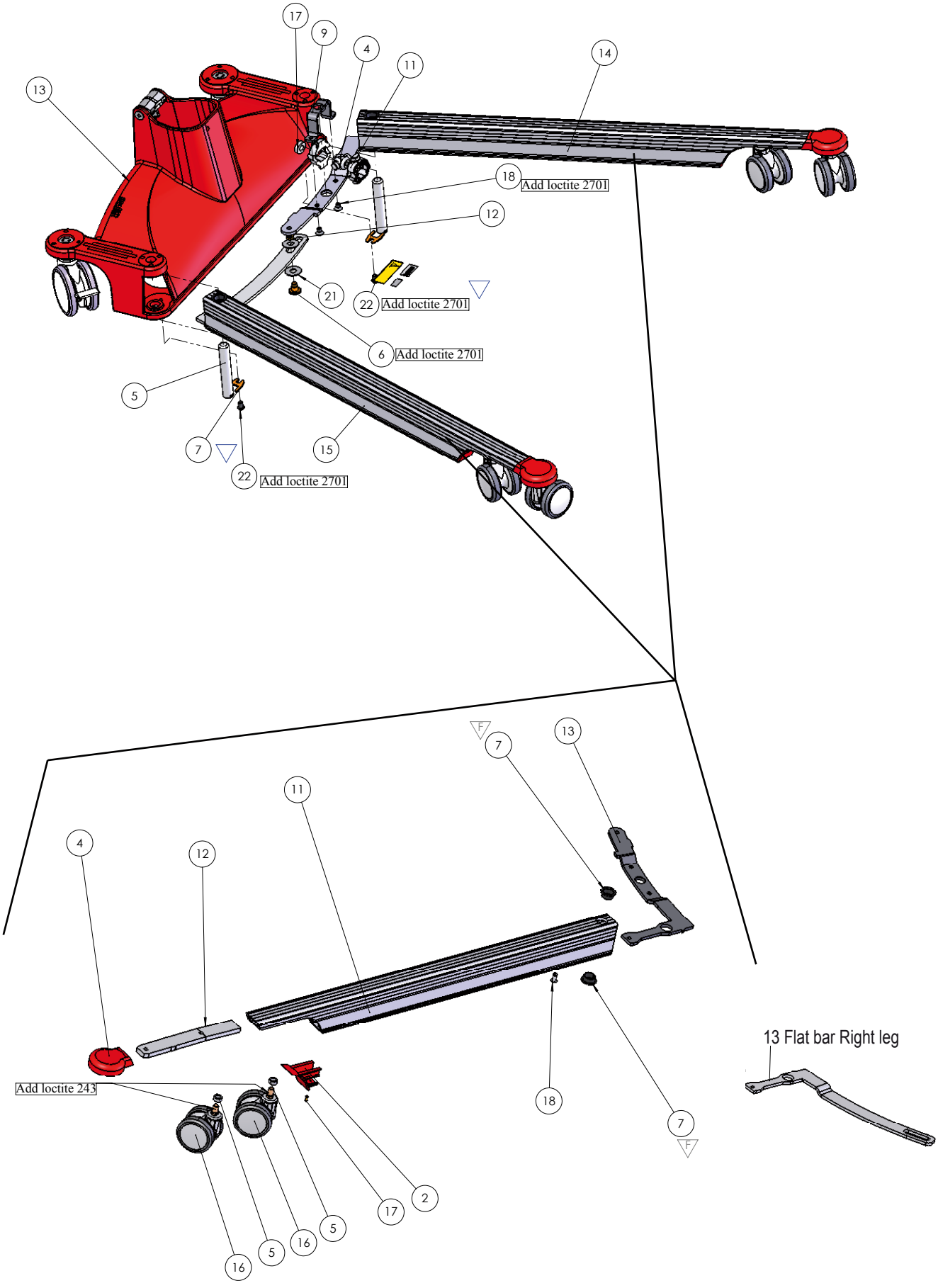




Appendix B

Pos.	Part. no.	Qty	Description
1			
2			
3			
4	1320117	1	Nut spindle
5	1320121	2	Bolt for leg
6	1320122	1	Bolt leg spred mech 205
7	1320119	2	Locking plate
8			
9	1320114	1	Bracket Leg spreading P205/255
10			
11	1320116	2	Nut holder, P230
12	0228138	2	Bushing bronze 5MM
13	App C	1	Chassie assembly, see App C
14	1320501	1	Left Leg Assy P230/P255, see pos 14.2-14.18
15	1320502	1	Right Leg Assy P230/P255 see pos 14.2-14.18
16			
17	1320131	1	PUR ring, 90 shore ø12x25x7
18	1320206	2	Screw DIN 7991 M8X12 8.8 ELZN
19	0220309	1	Label, Authorized Crew Only
20	0421135	1	Decal: ID,no
21	1320123	2	Washer, Nylon ø31,7xø13x1,6
22	1120506	2	Screw ISO7380 M8x12 ElZn
26		1	Label controlled sign
			Leg, left and right (pos 14 and 15)
14.2	1320102	1	Cover, Leg, Partner 205
14.4	1320104	1	Shock cap, leg P230
14.5	1320105	2	Spacer for wheel P205/230/255
14.7	0910180	2	Bushing, Flanged TFF 20115
14.11	1320101	1	Leg P230/255
14.12	1320103	1	Steel inforcement P230/255
14.13	1420106	1	Bar, flat for leg, left
14.13	1420111	1	Bar, flat for leg, right
14.16	0920107	2	Wheel Ø75mm without Brake
14.17	1320110	1	Rivet Dowel ø3x10
14.18	1410118	1	Monobolt ø6,4x19

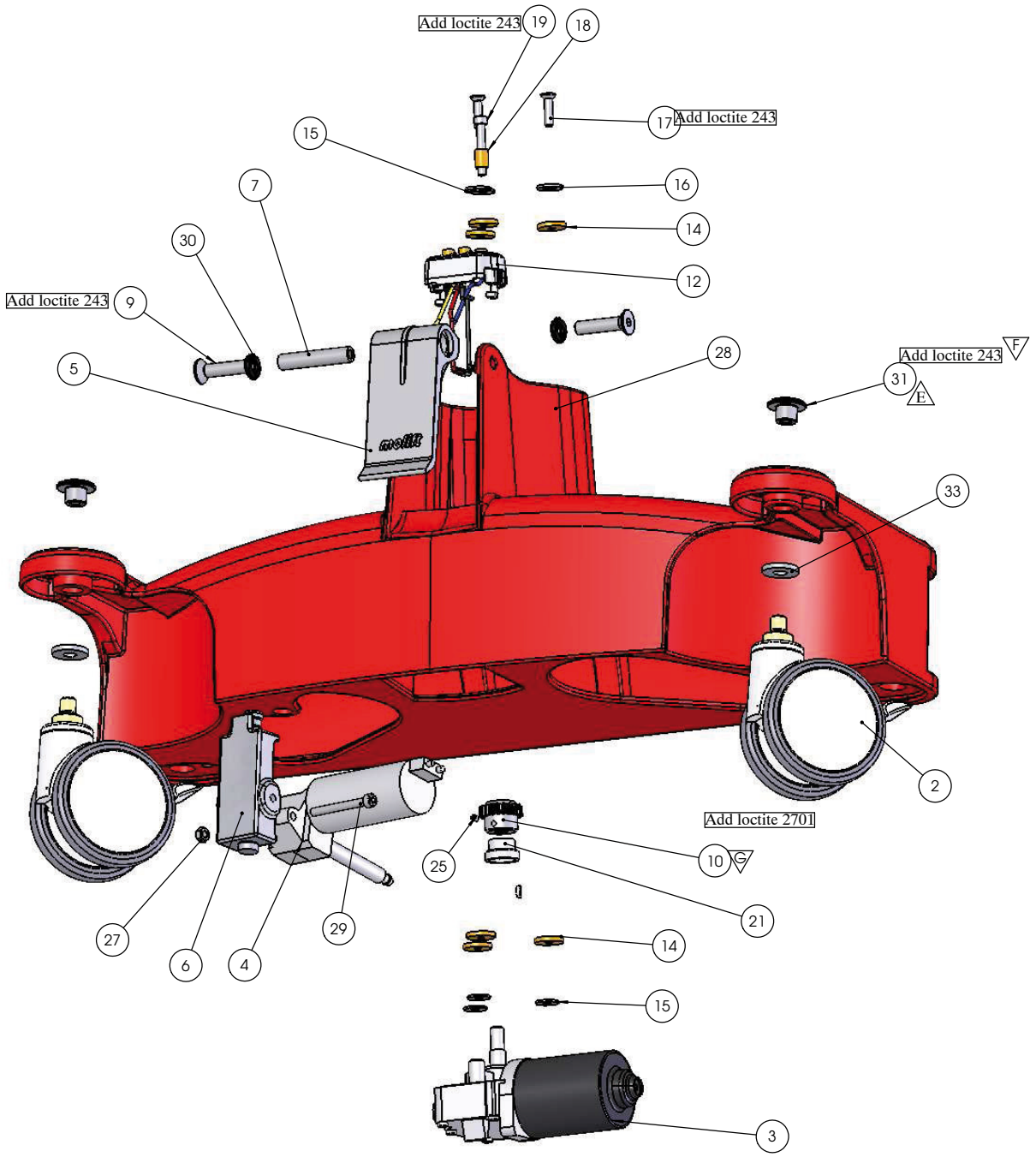
Chassie with legs



Appendix C

Pos.	Part. no.	Qty	Description
1			
2	1320108	2	Wheel ø100 w/ brake
3	1220110	1	Motor, VALEO SW2K 240 rpm
4	1320150	1	Leg spreading motor Valeo 404689
5	1320115	1	Eccentric lock, P230, chassie
6	1320118	1	Swiwel joint
7	1320126	1	Bolt for column lock, P230/255
8			
9	1101534	2	Screw M8x16 ISO 7380 Round headed hex
10	1320130	1	Connector w/exterior cogs
11			
12	1310128	1	Lower mould, contact P230
13			
14	0220118	6	Washer Neoprene ø22xø5,5x3,5
15	0220121	4	Washer DIN 9021 Ø6,4 Elzn
16	0220122	2	Washer DIN 125B Ø10.5 Elzn
17	0421131	2	Screw DIN 7991 M6X30 Elzn
18	0920216	1	Rivet Nut M6x16,5 UKO 55 st.
19	0229203	1	Screw ISO 7380 M6X40 ELZN
20			
21	1320120	1	Distance ring, motor Valeo
22			
23			
24			
25	1320124	1	Screw DIN 914 M5X8 A2
26			
27	0228125	1	Nut, Lock DIN 985 M6 Elzn
28	1420100	1	Chassis P205/230/255
29	1320208	1	Screw DIN 912 M6X55 ELZN
30	1320127	2	O-ring 12x5
31	0910153	2	Nut, Special M10
33	1320125	2	Washer DIN 6340 Ø10,5

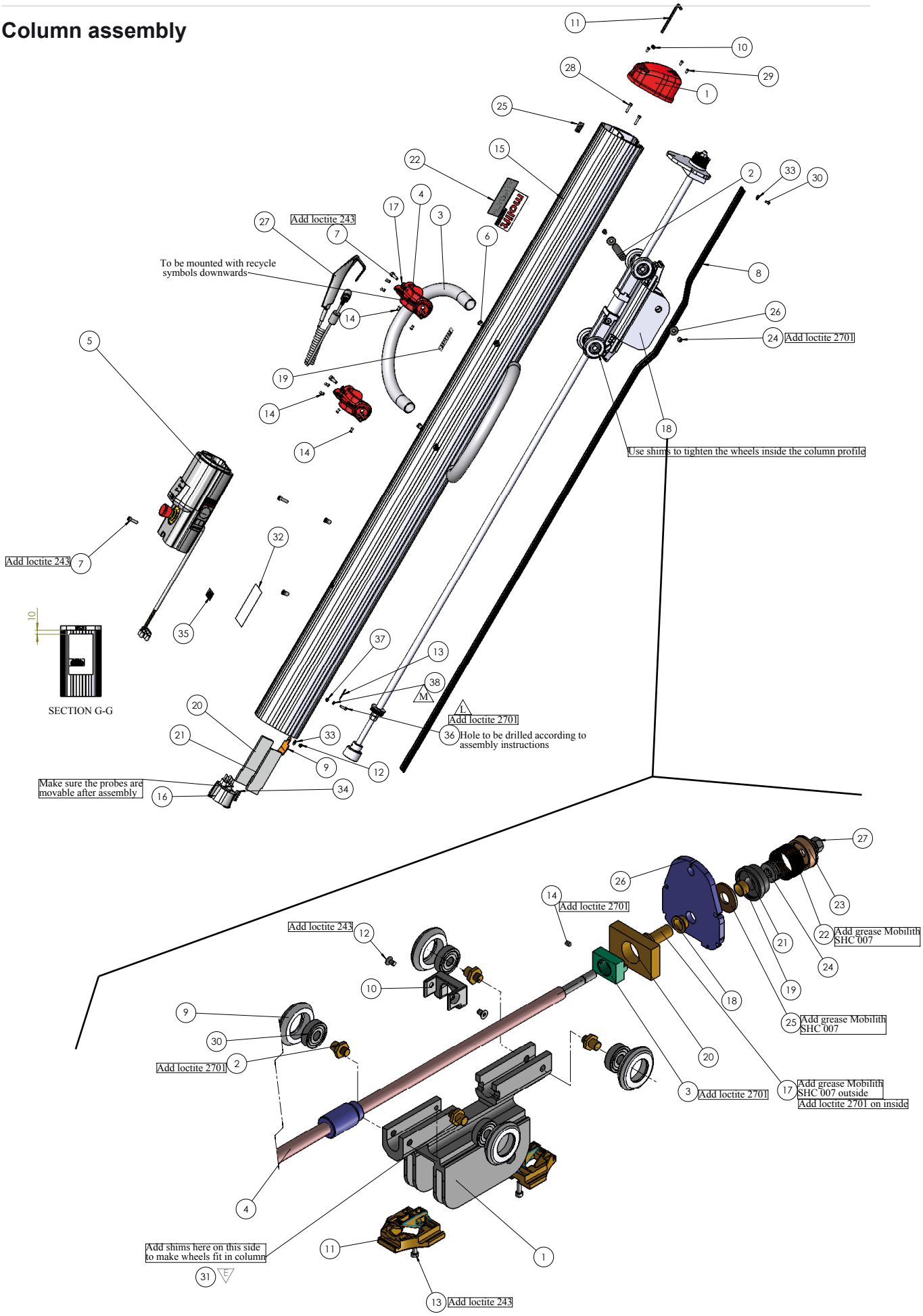
Chassis and motors



Appendix D

Pos.	Part. no.	Qty	Description
1	1310117	1	Top Cap Column P230
2	1310118	1	Lock Pin Trolley
3	0910107	2	Drive handle, Smart/205
4	1310119	2	Bracket drive handle P205-255
5	1411510	1	Batt.holder assy P205/P230-255
6	0920216	6	Rivet Nut M6x16,5 UKO 55 st.
7	1220120	6	Housing Nomad
8	1310103	1,8	Rubber profile P230/255
9	1310129	1	Fixing plate
10	0410117	1	Cable Gland RG2
11	1120505	1	Allen Key 5mm
12	1320205	1	Dowel Rivet DIN7337 ø4x6 A2
13	0210304	1	Label: Arrow 30x7mm Red
14	1450120	8	Rivet DIN 7337 Dim. 4 x 16
15	1310101	1	Column machined P230
16	1310127	1	Contact P230
17	0220121	4	Washer DIN 9021 Ø6,4 Elzn
18	1311501	1	Trolley w spindel assy, see 18.1 to 18.31
19	0210305	1	Label: Slinglabel (XXS-XXL)
20	1410102	1	Flat Bar Column Left
21	1410103	1	Flat Bar Column Right
22	0210308	2	Label Partner logo
23	1310123		Electric diagram
24	0220119	2	Screw ISO 7380 M6X10 Elzn.
25	1310303	1	Label Emerg. Stop (brady)
26	1330115	2	Washer SRKB 7x25x1,5 ElZn
27	2018004	1	Hand Control Partner/QR2
28	1320201	2	Screw DIN 912 M4X20 ELZN
29	1101532	3	Screw ISO 7045 M4X8 TORX
30	1320203	1	Screw ISO 7380 M4X8 ELZN
31			
32	1310302	1	Label, Technical data P255
33	0310120	2	Washer DIN 9021 DIM 4 Elzn
34	1310307	1	Label, Controlled date/sign.
35	0421135	1	Decal: ID,no
36	1410137	1	Screw DIN912 M4x14 ElZn 8.8
37	1150133	1	Lock Nut DIN 985 M4 ElZn
38	1420521	1	Sleeve column ass.P205/P230
18.1	1310113	1	Trolley, column P230/P255
18.2	1310109	4	Bearing Axle Trolley
18.3	1310116	1	Guide Sleeve Trolley
18.4	1310102	1	Ball Screw Partner 230
18.5	0210114	5	Spring, Cup 34x12x1,25
18.6	1320210	2	Nut DIN 439 B M12x1,25
18.7			
18.8			
18.9	1310110	4	Wheel Trolley
18.10	1310107	1	Distance plate Trolley
18.11	1310108	2	Guide Sealing Trolley
18.12	1320207	2	Screw DIN 7991 M6X10 8.8 ElZn
18.13	1320209	2	Screw DIN 912 M5X16 8.8 ELZN
18.14	1320124	1	Screw DIN 914 M5X8 A2
18.15	0210117	1	Female Connector Partner (M12)
18.16			
18.17	1310115	1	Sleeve Brake Trolley
18.18	1310141	1	Flanged bearing PAF 15090 P10
18.19		1	Slide bearing PAP 1510 P10, see pos 18.32
18.20		1	End stopper, column, see pos 18.32
18.21		1	Bearing house lower, column, see pos 18.32
18.22		1	Spring brake, column, see pos 18.32
18.23		1	Bearing house upper, column, see pos 18.32
18.24		1	Thrust ball bearing TYPE 51103, see pos 18.32
18.25		1	Brake washer, column P255, see pos 18.32
18.26	1310134	1	Top Plate Column P230/255
18.27		1	Nut, Lock DIN 985 M10 Elzn, see pos 18.32
18.28	1101511	1	Spring pin DIN 1481 6x24
18.29	0210115	1	Washer 12,5x35x2 Elzn
18.30	1310140	4	Ball Bearing type LR 201 NPPU
18.31	1310137	6	Shims DIN/ISO 988 ø12xø18x0,3
18.32	1310501	1	Brake column set P230/P255, incl pos 18.19, 18.20, 18.21, 18.22, 18.23, 18.24, 18.25, 18.27

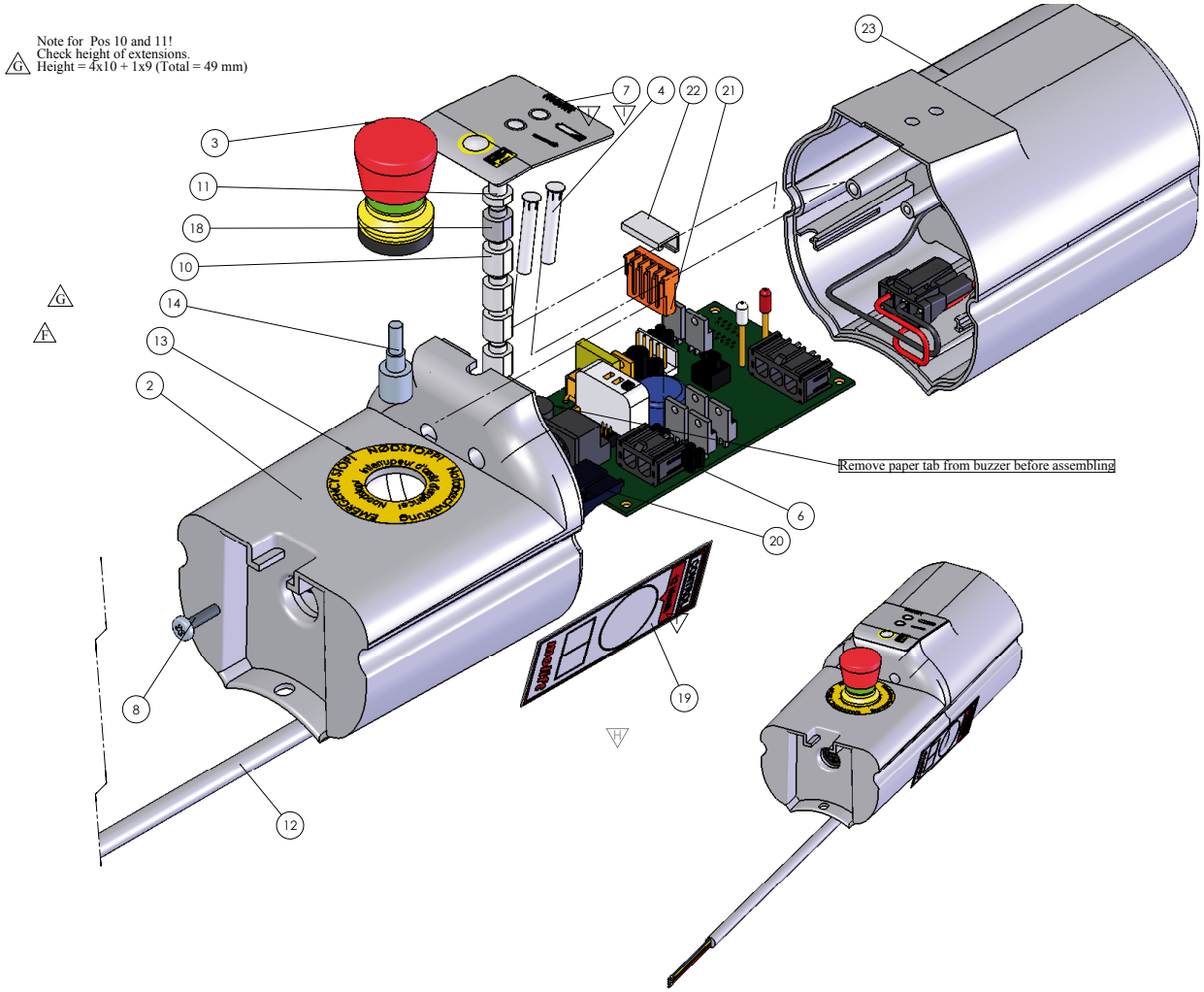
Column assembly


Add loctite 243
To be mounted with recycle symbols downwards
Add loctite 2701
Use shims to tighten the wheels inside the column profile
Add loctite 243
SECTION G-G
Add loctite 2701
Hole to be drilled according to assembly instructions
Make sure the probes are movable after assembly
Add loctite 2701
Add loctite 243
Add grease Mobilith SHC 007
Add grease Mobilith SHC 007
Add loctite 2701
Add grease Mobilith SHC 007 outside
Add loctite 2701 on inside
Add loctite 2701
Add shims here on this side to make wheels fit in column
Add loctite 243

Appendix E

Pos.	Part. no.	Qty	Description
1			
2	1310126	1	Lower mould, P230
3	0920114	1	Emergency Stop Switch
4	1310120	2	LED-Guide
5			
6	1320112	1	Main PCB
7	1310122	1	Membrane Battery Holder P230/2
8	1310133	1	Screw PT 1452 40X16
9			
10	1310135	4	Screw PT 1452 40X16
11	1310136	1	End Piece(cap) 1S11-19,0
12	1310121	1	Motorcable, P230
13	0220307	1	Label Emergency Stop
14	0910167	1	Emergency stop extention
15			
16			
17			
18	1310138	1	Extender black 9mm RoHS
19	1100303	1	Label:Hi-Trac Security Control
20	0920072	1	Molex Plug 44441-2002 Smart
21	1310144	1	Contact AMP 3-0640426-5
22	1310145	1	Cover to conta. AMP0-0640551-5
23	1310139	1	Upper Mould assy P205/230/255

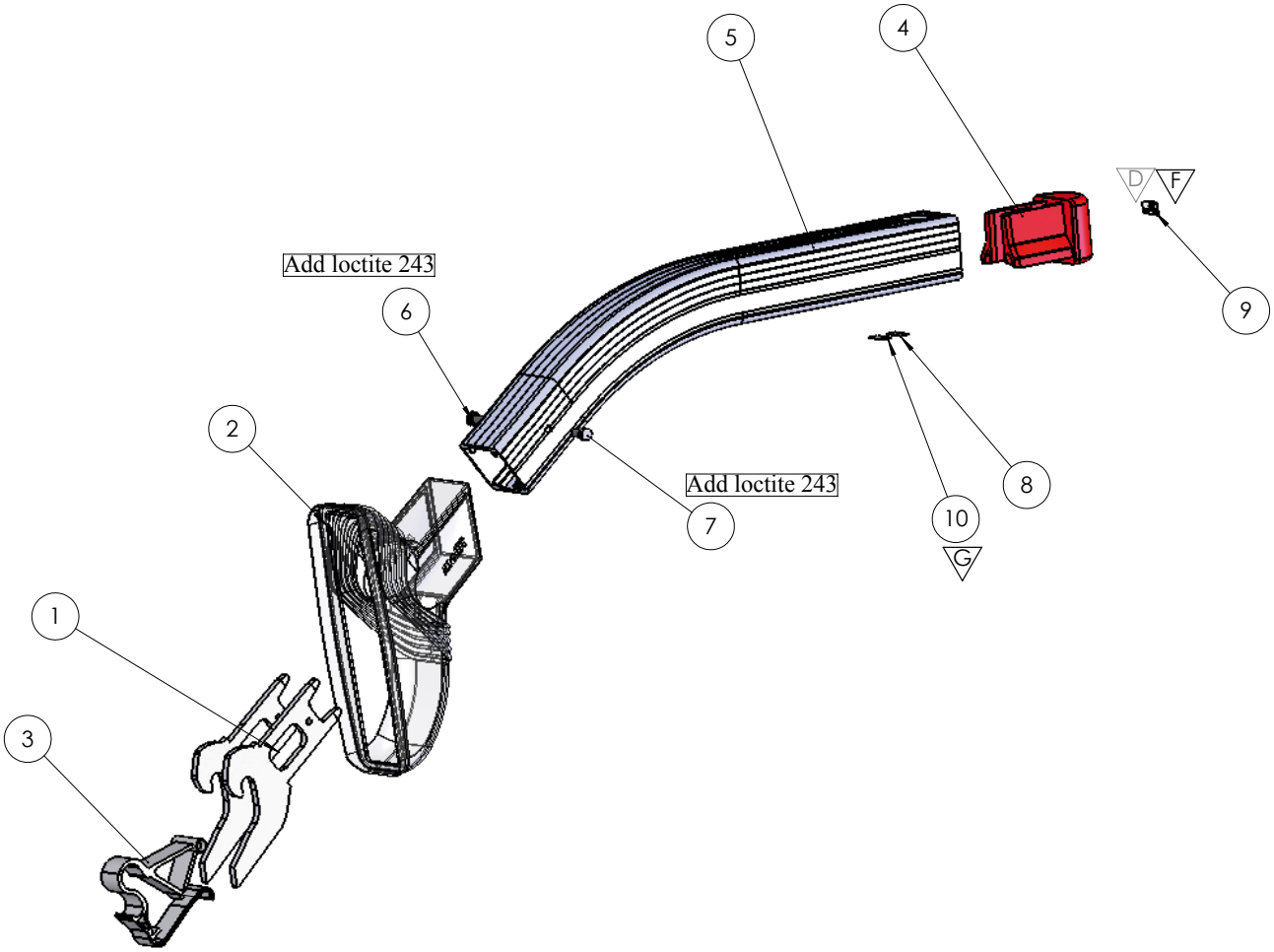
Battery holder assembly



Appendix F

Pos.	Part. no.	Qty	Description
1		2	Flat Bar Arm, Partner 230/255, see pos 5
2	1330108	1	Rubber Cover Arm, P230/255
3	1330105	1	Locking handel,arm P230/255 (incl. in pos 5)
4	1330104	1	Endcap arm, P230
5	1330121	1	Lifting arm, spare part, incl pos 1, 3, 7,8
6	1330109	1	Screw ISO 4017 M8X40 8.8 EL (incl. in pos 5)
7	1101522	1	Screw ISO 4017 M8X16 8.8 EL (incl. in pos 5)
8	1310306	1	Label, Art. Id. No. (Brady)
9	1310304	1	Label, SWL 255kg (Brady)
10	1310307	1	Label, Controlled date/sign.

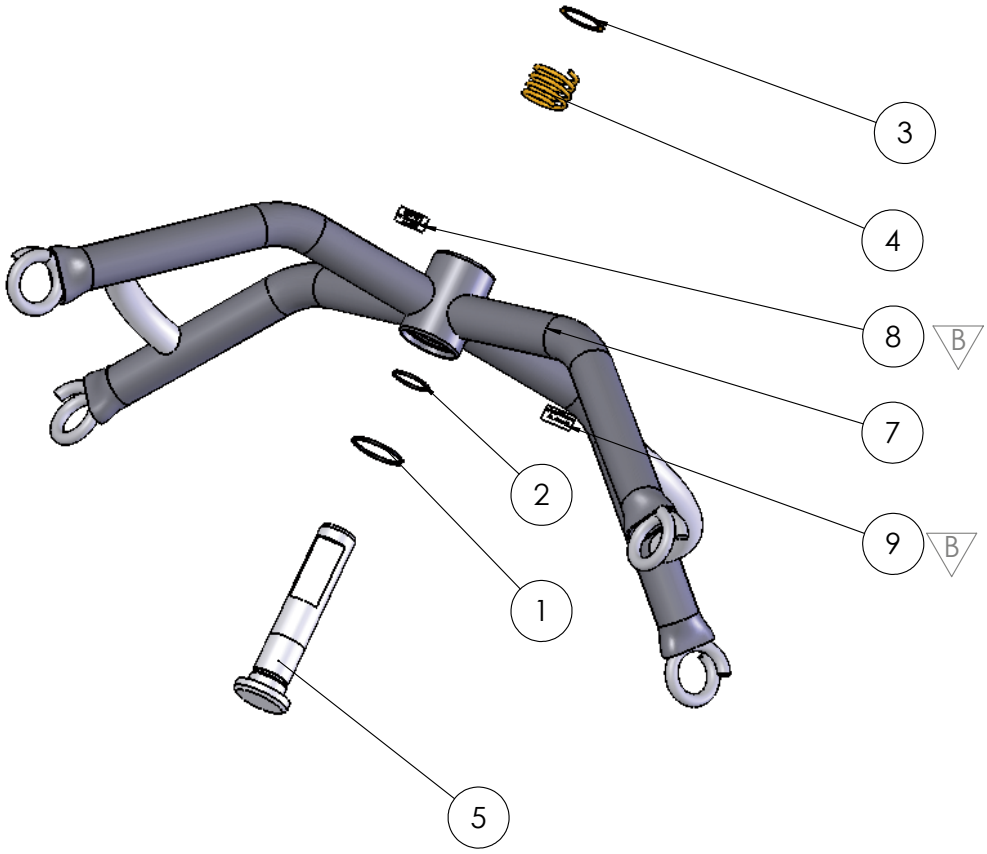
Lifting arm

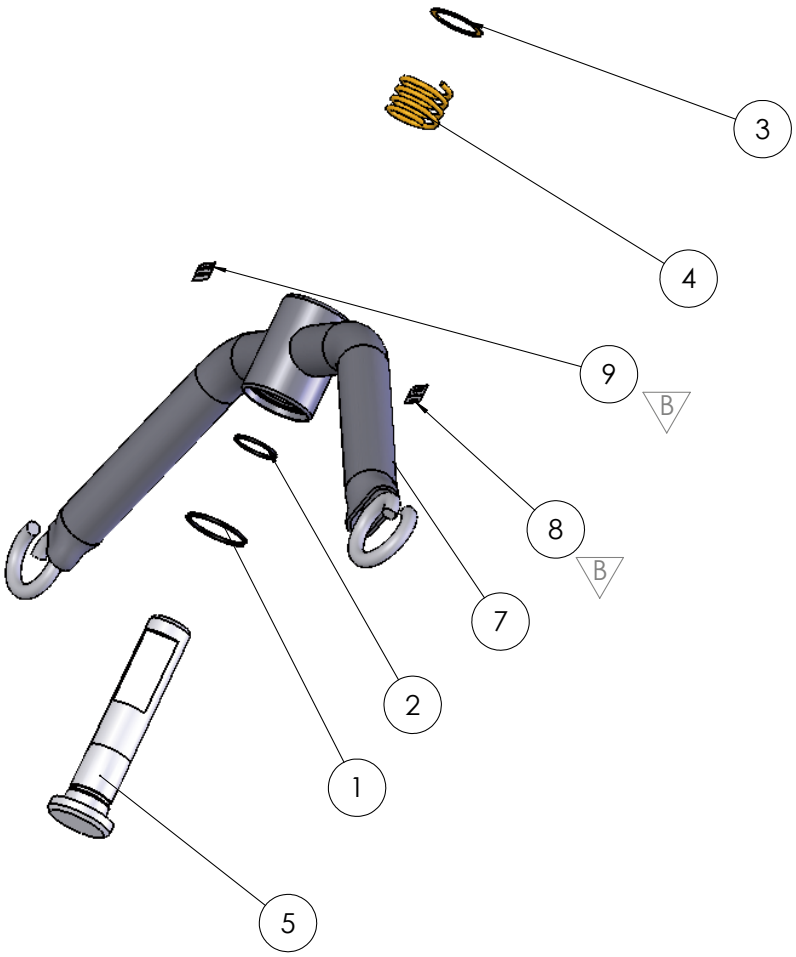


Appendix G

Pos.	Part. no.	Qty	Description
1	1330111	1	O-ring ø39,2x3,0 N70B
2	1330112	1	O-ring ø18x3,0 N70B100N
3	1330113	1	Washer, Nylon ø31x43x1,65
4	1330107	1	Spring, Hagens 1725 ø30x35
5	1330106	1	Lockbolt Suspension Partner230
6			
7			Alternative suspensions as below
	1330201	1	Suspension, 4X P230 XL
	1330202	1	Suspension, 2X P230 Large
	1330203	1	Suspension, 2X P230 Medium
	1330204	1	Suspension, 4X P230 Medium
	1330205	1	Suspension, 4X P230 Large
8	1310306	1	Label, Art. Id. No. (Brady)
9	1310307	1	Label, Controlled date/sign.
10	1330901	1	Painted Grey RAL 7047

Suspensions



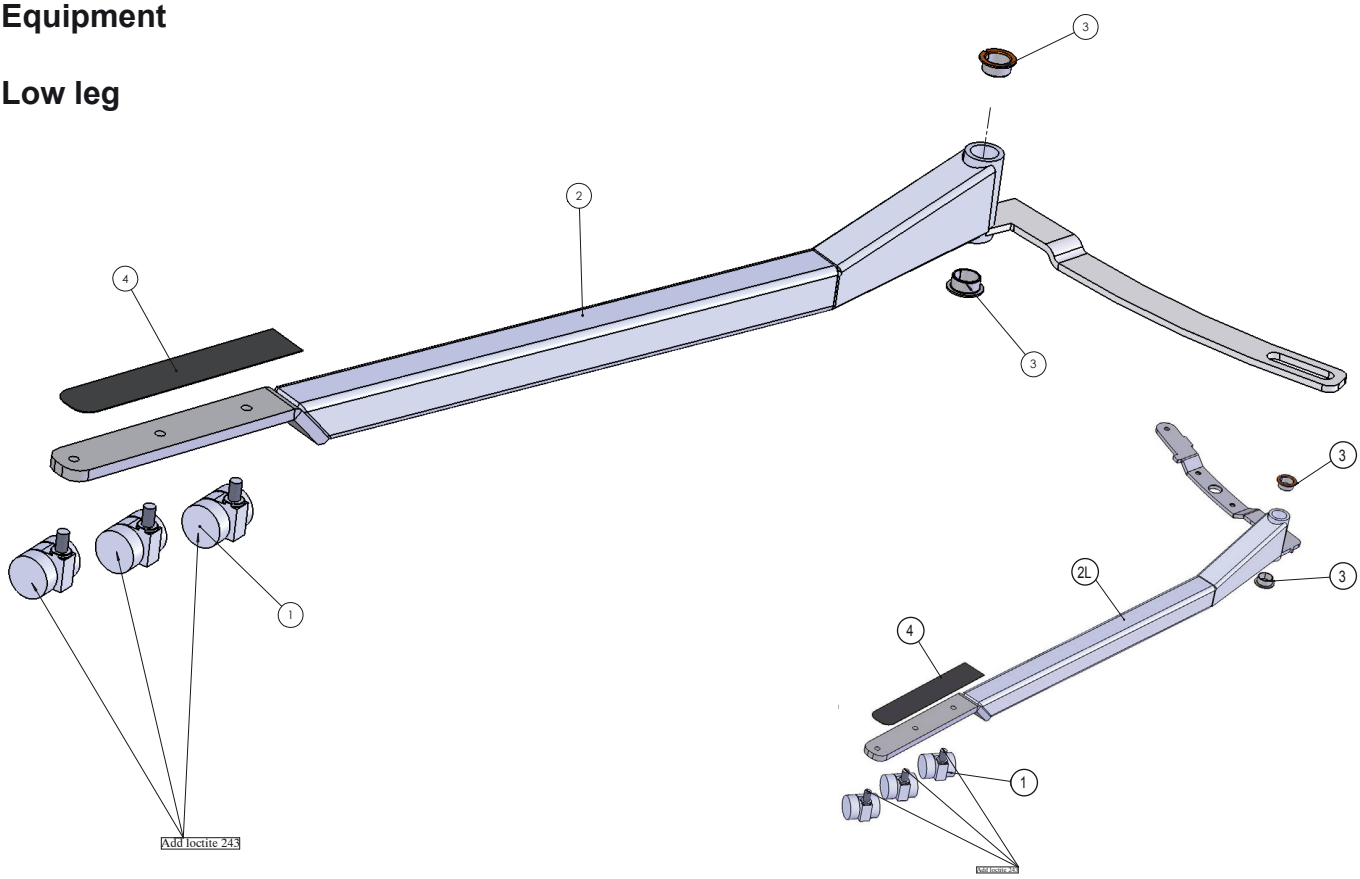


Appendix H

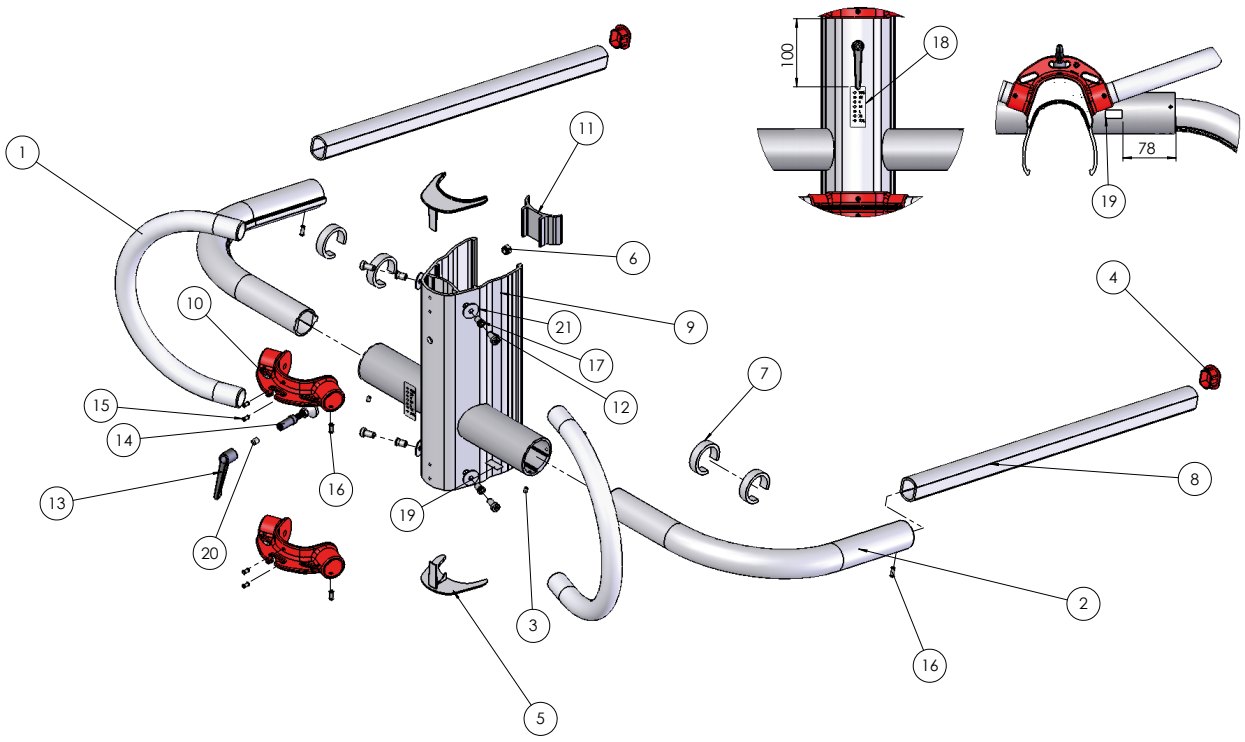
Pos.	Part. no.	Qty	Description
			LOW LEGS
1	1320510	6	Wheel Movetto DDK 231-3x10
2	1320509	1	Right low leg welded P230/255
2L	1320508	1	Left lower leg welded P230/255
3	0910180	2	Bushing, Flanged TFF 20115
4	0420253	4	Anti Skid Leg QR1
			SUPPORTING ARM
1	0910107	2	Drive handle, Smart/205
2	1350103	2	Middle pipe walker, P255
3	1320124	4	Screw DIN 914 M5X8 A2
4	1350110	2	End cover, KB, P255
5	1350112	2	Cover, walker bar. KB 255
6	1350115	1	Nut, fot adjust pressure M8
7	1350111	4	Support guide KB 255
8	1350102	2	Innerpipe walker, P255
9	1350101	1	Walker bars welded, P255
10	1310119	2	Bracket drive handle P205-255
11	1350104	1	Alu profile pressure adjust
12	0220120	4	Screw DIN 912 M6x20 8.8 ELZN
13	1350117	1	Locking handle M8
14	1350116	1	Foot 209/M08x33 TH1 (Torp)
15	1450120	4	Rivet DIN 7337 Dim. 4 x 16
16	1450120	6	Rivet DIN 7337 Dim. 4 x 16
17	0920216	4	Rivet Nut M6x16,5 UKO 55 st.
18	0210305	1	Label: Slinglabel (XXS-XXL)
19	1310306	1	Label, Art. Id. No. (Brady)
20	1120503	1	Screw, grub DIN 916 M8 X 10 A4
21	1330115	4	Washer SRKB 7x25x1,5 ElZn

Equipment

Low leg

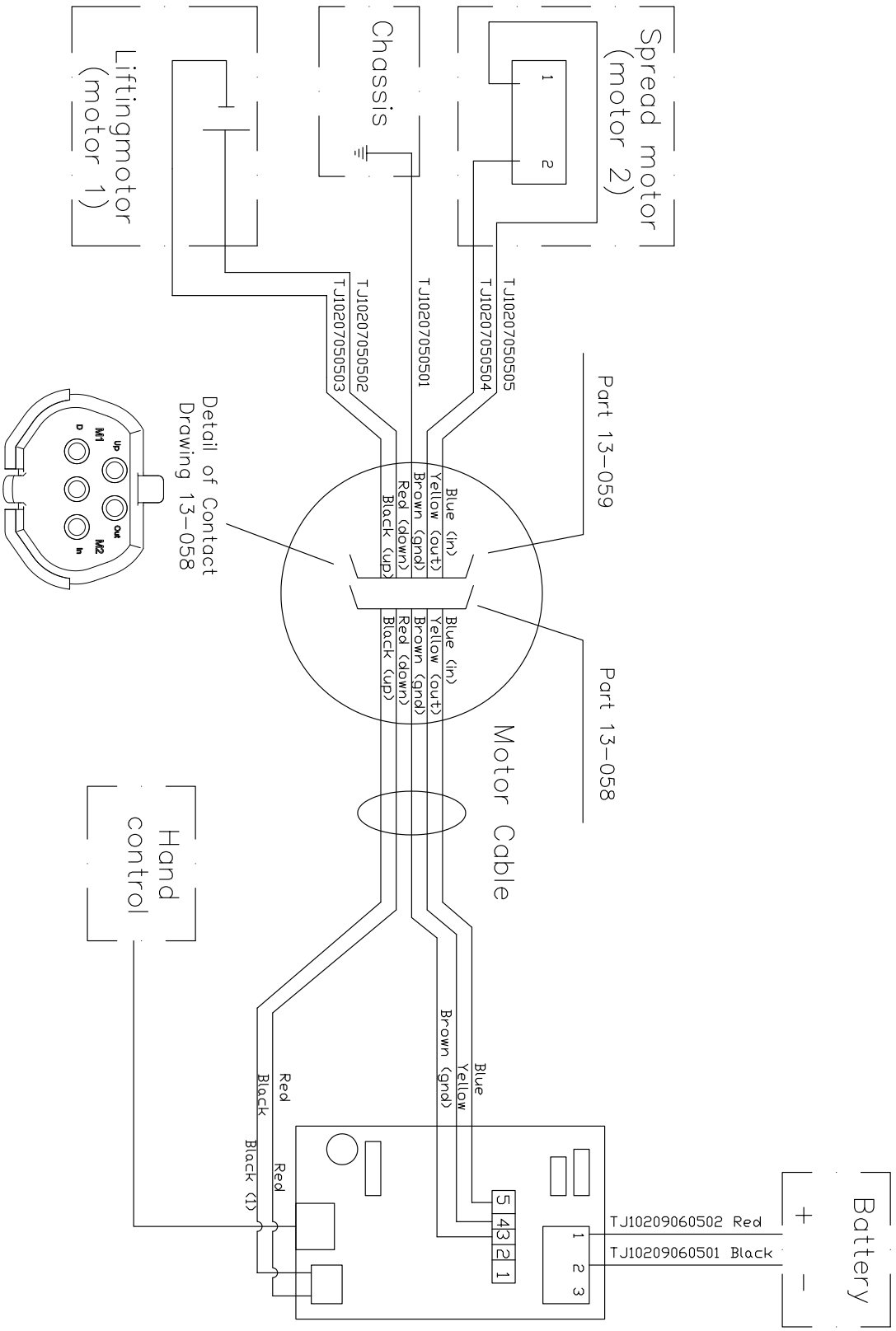


Supporting arms



Appendix I

Electrical diagram



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